the relational database that are important to understanding the "dynamic" nature of the clear window time period are the Index Table and Window Table. The Index Table reads as follows:

## **INDEX TABLE**

This table provides a preliminary step for assigning and accessing different tables during the Episode of Care process. This table houses the assignment of staging and whether or not the Index Global table should be accessed.

Field name	Type	<u>Length</u>	<u>Description</u>
Index	Alpha/Numeric	5	Left justified assumed decimal after 3 <sup>rd</sup> position.
Staging Indicator	Character	2	P = preventive A = acute C = chronic L = life threatening M = manifestations
Global Key	Alpha	2	C = Complications  M1 = miscoded  medical vcodes  M2 = miscoded  surgical vcodes  1 = medical vcodes  2 = surgical vcodes
Indicator	Character	2	C = complications V = vcodes
Update	Character	1	A, C, or Blank

Total USE: 12

- Once an Index code has been selected, this table is searched for whether or not the global index table needs to be accessed.
- This table assigns the staging for the index code which points to the window table.
- This table interrelates with:
  - ICD Description Table
  - Index Detail Table
  - Index Global Table
  - Window Table

See page 12, lines 5-25 of revised specification, emphasis added (or page 23, lines 2-12 through page 24, lines 1-16 of the Original Specification). The Window Table reads as follows:

#### WINDOW TABLE

This table contains the time period preceding and following an episode of care that must be present without any services provided to the patient relating to the index code or associated codes. These windows are used to define the beginning and end points of an episode of care. This table is driven from the staging field in the index table.

Field name	Type	<u>Length</u>	<u>Description</u>
Staging Indicator	Character	2	P = Preventive C = Chronic A = Acute L = Life threatening M = Manifestation
Beginning Window	Numeric	3	Number of days for no occurrence of ICD for Index Code
Ending Window	Numeric	3	Number of days for no occurrence of ICD for Index Code
Update	Character	1	A, C, or Blank

Total USE:

> This table is keyed off of the staging indicator and it tells the program how long of a "Clear Window" is needed on both ends of this EOC for it to be valid.

9

See page 14, lines 6-22 of revised specification, emphasis added (or page 27, lines 1-17 of the Original Specification).

As illustrated above, both the Index and Window tables contain a "Staging Indicator" data field. The "Staging Indicator" data field is a foreign key linking the Index table to the Window table. Its purpose is to allow the present invention to relate a principal diagnosis or "episode treatment category", represented by an index code, to the associated beginning and end points of an episode of care. As set forth above, the beginning and end points of an episode of care defines the "dynamic time window". In both the Index and Window tables, the "Staging Indicator" data field includes the same Type, Length, and Description fields, indicating that it contains the same information in both tables. One of ordinary skill in the art understands that in a relational database, tables are commonly normalized in this manner to prevent duplicative

information. This is the case with the Index and Window tables of the present invention. These tables are normalized to reduce duplicate data. The normalization of the "Staging Indicator" data field also provides a link between the Index and Window tables, linking the Index field in the Index table to the window sizes in the Window table. In order to illustrate more clearly how the Index field within the Index table and the window sizes within the Window table are linked, consider the above referenced Index and Window tables populated with data as follows:

### Index Table:

Index	Staging Indicator	Global Key	Indicator	Update
123	P	С	С	. ,
345X	P	1	V	Α
355XX	С	l	V	
6221	A	2	V	
•	•		•	•
<u> </u>	<u> </u>	-	-	<u> </u>
•				-

#### Window Table:

Staging Indicator	Beginning Window	Ending Window	Update
P	30	30	
С	90	180	
A	60	60	
L	90	90	
M	15	30	

The following source code, set forth at page 9 lines 25-30 of the source code Appendix of the present application, performs the step of linking the Index and Window tables:

# Get EOC window size for this index

# select beg\_win into win\_max
from windows
where staging in
(select staging from index where index=ir.index)

In the above quoted source code, "beg\_win" is the beginning window field in the window table, "win max" is a variable used to hold the clear window time period,

"windows" is a reference to the window table, "index" is a reference to the index table, and "ir.index" refers to a specific index code specified by the program. In this example, the index code "123" has a clear window time period of 30 days, found by using its staging indicator, "P", which has a link to the window table by way of the normalized "Staging Indicator" field that is common in both tables. The link of the "Staging Indicator" fields results in a lookup on the Beginning Window field in the Window table, locating 30 days. By the same methodology, index codes 345X, 355X and 6221 look up their respective clear windows by retrieving data set forth in the beginning widow field; the index code "345X" looks up its clear window time period of 30 days, "355XX" looks up its clear window time period of 90 days, and "6221" looks up its clear window time period of 60 days.

Applicant respectfully submits that the above example and excerpts from the specification illustrate how "clear windows" are dynamic time windows. The above example further illustrates how each Index Code is used to drive the search for each episode of care, and how each episode of care has its own unique dynamic time window ("clear window") associated therewith. In defining clear windows, the specification states, "[c]lear window processing defines the onset and resolution points of a diagnosis to establish an episode of care." See page 30 lines 32-33 of Revised Specification. As set forth above, in association with the window table, it is stated, "a "Clear Window" is needed on both ends of this EOC for it to be valid." See page 14 lines 6-22 of revised specification. It is also stated above, in referring to clear windows, "[t] hese windows are used to define the beginning and end points of an episode of care." See page 14 lines 6-22 of revised specification. Clearly, this language, which is in both the Original and Revised specifications, defines "Clear Window" as including the beginning window and ending window of an episode of care. Applicant respectfully submits that because there are groups of beginning window time periods and ending window time periods stored in the relational database tables that are being used to generate episode of care clear windows, clear windows are dynamic time periods. Accordingly, the claim language of a dynamic time window is enabled under 35 U.S.C. §112.

Applicant also directs the Examiner to the Index Detail Table on page 10 of the substitute specification and the related description, to further illustrate how the Index Code is used to drive the search for each episode of care. The search to establish an episode of care is

keyed off the Index Code field. Each Index Code corresponds to one or a group of ICD-9 codes, and only ICD-9 codes associated with the Index Code in the Index Detail Table with the Indicator "I" can initiate an EOC. Thus a patient record having an ICD-9 code that matches an ICD-9 code in the Index Detail Table with the Indicator "I" corresponds to an "anchor record" in the Dang patent.

# **CONCLUSION**

If the Examiner believes further telephone interview of this case is necessary to expedite examination, contact should be made with the undersigned attorney at (612) 371-5219.

Respectfully submitted,

Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402 (612) 332-5300

Date: April 25,2001

Alan G. Gorman Reg. No. 38,472

**AGG**